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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SAMBIT PATTANAYAK, EDWARD GLASSMAN,
and RICHARD FRANCIS CRUM

Appeal 2017-008325¹
Application 14/248,706²
Technology Center 3600

Before BRADLEY W. BAUMEISTER, JAMES B. ARPIN, and
JON M. JURGOVAN, *Administrative Patent Judges*.

ARPIN, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1, 3–10, and 12–18. Br. 2. Claims 2 and 11 are cancelled. Final Act. 2. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ In this Decision, we refer to Appellants' Appeal Brief filed November 18, 2016 ("Br.") and Reply Brief filed May 15, 2017 ("Reply"); the Final Office Action mailed May 23, 2016 ("Final Act."); the Examiner's Answer mailed March 17, 2017 ("Ans.") and Advisory Action mailed August 29, 2016 ("Adv. Act."); and the originally filed Specification filed April 9, 2014 ("Spec.").

² Appellants list MasterCard International, Inc. as the real party-in-interest. Br. 2.

STATEMENT OF THE CASE

Appellants' recited methods and systems relate "to the processing of financial transactions involving payment cards issued to employees of a multinational corporation, specifically the processing of financial transactions involving a payment card issued by an issuer in a first country to an employee in a second country as a local transaction in the second country." Spec. ¶ 1; *see* Br. 2. These methods and systems enable an issuer to provide payment cards to multinational corporation employees in subsidiary countries without having to partner with other issuers or issue payment cards subject to cross-border fees and currency exchanges. Spec. ¶¶ 6, 49, 50, 54–56; *see* Br. 4.

Claims 1 and 9, directed to methods for facilitating a payment card transaction, as well as claims 10 and 18, directed to corresponding systems for performing such methods, are independent. Br. Claims App'x; *see id.* at 4–10. Claims 3–8 depend directly or indirectly from claim 1; and claims 12–17 depend directly or indirectly from claim 10. *Id.* Claims App'x.

Claim 1, reproduced below, is illustrative:

1. A computer-implemented method for facilitating a payment card transaction, comprising:

storing, in a database device of a processing server, a plurality of card association data entries, wherein each card association data entry includes data related to payment card numbers and includes at least a card association number (ICA), a country associated with the ICA, and a plurality of bank identification numbers (BINs) associated with the ICA;

receiving, by a receiving device of the processing server, a number request from a card issuing bank, wherein the number request originates from a first country and identifies a second country;

in response to receiving the number request from the card issuing bank, identifying, in the database device of the processing server, a specific card association data entry where the country associated with the ICA, included in the specific card association data entry, corresponds to the second country identified in the number request received from the card issuing bank;

identifying, by a processing device of the processing server, a subset of BINs of the plurality of BINs associated with the ICA included in the specific card association data entry;

transmitting, by a transmitting device of the processing server, the identified subset of BINs to the card issuing bank;

receiving, by the receiving device of the processing server, from a point-of-sale (POS) device of a merchant, an authorization request for a financial transaction, wherein the authorization request originates from the second country identified in the number request received from the card issuing bank and includes at least a payment card number, the payment card number being associated with a payment card issued by the card issuing bank and being associated with a BIN included in the subset of BINs;

transmitting, by the transmitting device of the processing server, the authorization request to the card issuing bank;

receiving, by the receiving device of the processing server, an authorization response from the card issuing bank indicating approval or denial of the financial transaction; and

forwarding, by the transmitting device of the processing server, the authorization response, received from the card issuing bank, indicating approval or denial of the financial transaction to the merchant.

Id.

THE REJECTION

Claims 1, 3–10, and 12–18 stand rejected under 35 U.S.C. § 101 “because the claim(s) as a whole, considering all claim elements both

individually and in combination, do not amount to significantly more than an abstract idea,” i.e., because the recited methods and system are patent-ineligible subject matter. Final Act. 3.³

More particularly, the Examiner concludes that the claims are directed to a “judicial exception.”

The claims are directed to the abstract idea for the optimization of financial transaction authorization processing when a transaction is initiated in a country different from the country in which a payment card (used in the transaction) is issued. This abstract idea is similar to the abstract idea of *a fundamental economic practice* and/or a method of organizing human activity that was previously deemed by the Supreme Court to be directed to non-statutory subject matter. . . . These are similar to the claims in [*buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350 (Fed. Cir. 2014) (“*buySAFE*”)] in which a contractual relationship is created, [*Classen Immunotherapies, Inc. v. Biogen IDEC*, 659 F.3d 1057 (Fed. Cir. 2011) (“*Classen*”)] for collecting and comparing known data such as the claimed BINs, subset of BINs and ICA numbers. Additionally, these claims are similar to the elements in the [*Cyberfone Sys., LLC v. CNN Interactive Grp, Inc.*, 558 Fed. Appx. 988 (Fed. Cir. 2014) (“*Cyberfone*”)] case where the features were organize, store and transmit information.

Final Act. 4–5 (emphasis added).

The Examiner also concludes that claim 1 does not add “significantly more” to the abstract idea.

The generic computer components are claimed to perform their basic functions of storing information, receiving a number request, identifying the two countries involved in the request, identifying a subset of BINs, transmitting the identified subset of BINs, receiving an authorization request for a financial transaction, transmitting the authorization request, receiving an

³ The Examiner indicates that claims 1, 3–10, and 12–18 are allowable over the prior art of record. Final Act. 13.

authorization response indicating approval or denial of the financial transaction and forwarding the authorization response to the merchant. The recitation of the claimed limitations amounts to mere instructions to implement the abstract idea on a computer. Taking the additional elements individually and in combination, the computer components (the processing server and point-of-sale (POS) device of a merchant) at each step of the process perform purely generic computer functions.

Id. at 8.⁴

Appellants present three contentions for why the pending claims are not directed to an abstract idea. First, Appellants contend that the Examiner erred by oversimplifying the claims. Br. 11–14. Second, Appellants contend that the Examiner erred by failing to recognize that the claims recite improvements to computer functionality. *Id.* at 14–16. Third, Appellants contend that the Examiner erred by failing to cite case law addressing claims directed to similar subject matter. *Id.* at 16–22. In addition, Appellants contend that the pending claims allegedly depend upon a specific structure of components that provide a technological solution to a technological problem and are narrowly drawn so as not to preempt any and all methods and systems for processing cross-border cardholder transactions. *Id.* at 23–

⁴ *See also Inventor Holdings, LLC v. Bed Bath & Beyond, Inc.*, 876 F.3d 1372, 1378 (Fed. Cir. 2017) (“The idea that a customer may pay for items ordered from a remote seller at a third-party’s local establishment is the type of fundamental business practice that, when implemented using generic computer technology, is not patent eligible under *Alice*.”); *Inventor Holdings, LLC v. Bed Bath & Beyond, Inc.*, 2016 WL 3090633, at *2 (D.C. Del. 2016) (“There is a strong argument that using a third-party intermediary to create a remote pay system is an abstract idea in light of *Bilski*. To this abstract idea, [Inventor Holdings] merely added a generic computer implementation, which under *Mayo* is insufficient to establish patentability.”). Although this decision issued after the completion of briefing in this appeal, we find our reviewing court’s analysis informative.

24. Further, Appellants contend that the pending claims include additional elements that are sufficient to amount to significantly more than the abstract idea. *Id.* at 24–28. Finally, Appellants contend that the Examiner failed to address the claims individually and in detail. *Id.* at 28.

We address these contentions below.

PRINCIPLES OF LAW

We have reviewed the appealed rejection for error based upon the issues identified by Appellants, and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential).

Regarding the question of patent eligibility under 35 U.S.C. § 101, a patent may be obtained for “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” The U.S. Supreme Court has “long held that this provision contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014) (emphasis added; quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)).

Accordingly, in applying the § 101 exception, the Court cautioned:

[W]e must distinguish between patents that claim the “buildin[g] block[s]” of human ingenuity and those that integrate the building blocks into something more, thereby “transform[ing]” them into a patent-eligible invention. The former “would risk disproportionately tying up the use of the underlying” ideas, and are therefore ineligible for patent protection. The latter pose no comparable risk of pre-emption, and therefore remain eligible for the monopoly granted under our patent laws.

Alice, 134 S. Ct. at 2354–55.

The Court in *Alice* reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 82–83 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice*, 134 S. Ct. at 2355. The first step in that analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts,” such as an abstract idea. *Id.* For example, a fundamental economic practice is an abstract idea:

[In *Bilski v. Kappos*], the Court grounded its conclusion that all of the claims at issue were abstract ideas in the understanding that risk hedging was a “‘fundamental economic practice.’” 561 U.S.[593,] 611[(2010)].

Alice, 134 S. Ct. at 2357.

The Court acknowledged in *Mayo* that “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Mayo*, 566 U.S. at 71. We, therefore, look to whether the claims focus on a specific method or means that improves the relevant technology or instead are directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016) (“*Enfish*”). If the claims are not directed to an abstract idea, the inquiry ends. *Id.* at 1339. Otherwise, the inquiry proceeds to the second step in which the elements of the claims are considered “individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 566 U.S. at 79).

Central to our analysis is the fundamental principle that the *Alice* framework must be applied *to the claims*, as properly construed. As our reviewing court has stated, “[t]he § 101 inquiry must focus on the language of the Asserted Claims themselves.” *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1149 (Fed. Cir. 2016); *see also Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1345 (Fed. Cir. 2013) (admonishing that “the important inquiry for a § 101 analysis is *to look to the claim*” (emphasis added)); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1346 (Fed. Cir. 2014) (focusing on “whether the *claims* of the asserted patents fall within the excluded category of abstract ideas” (emphasis added)).

These principles are based on long-established jurisprudence that “[i]t is the claims [that] define the metes and bounds of the invention entitled to the protection of the patent system.” *In re Warmerdam*, 33 F.3d 1354, 1360 (Fed. Cir. 1994) (citing *Zenith Lab. Inc. v. Bristol–Myers Squibb Co.*, 19 F.3d 1418, 1424 (Fed. Cir. 1994)); *see also In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998) (“[T]he name of the game is the claim.”).

ANALYSIS

1. *Alice Step One*

a. The Examiner Does Not Oversimplify the Claims.

Appellants contend that the Examiner glosses over detail in summarizing the claims. *See id.* at 12–13. In support, Appellants provide a table comparing the recitations of claim 1 to the Examiner’s allegedly oversimplified characterizations of those recitations. *Id.* Appellants note that “the [*McRO, Inc. dba Planet Blue v. Bandai Namco Games America Inc.*, 837 F.3d 1299 (Fed. Cir. 2016) (“*McRO*”)] court cautioned that courts

must be careful to avoid oversimplifying the claims ‘by looking at them generally and failing to account for the specific requirements of the claims.’” *Id.* at 13 (citing Comm’r for Patents Memorandum, “Recent Subject Matter Eligibility Decisions,” 2 (Nov. 2, 2016) (“11/02/16 Mem.”)). In its Reply, Appellants draw further similarities with the claims at issue in *McRO*, noting that *McRO* involved that application of rules that *improved* existing technological processes of computer animation, rather than merely using a tool to perform an existing process. Reply 5–6.

In *McRO*, the recited methods involved using lip-synch techniques to improve animation, something that human animators did not do. 11/02/16 Mem. 2; MPEP 2106.04(a)(I)⁵; *see McRO*, 837 F.3d at 1315 (“Here, the structure of the limited rules reflects a specific implementation not demonstrated as that which ‘any [animator] engaged in the search for [an automation process] would likely have utilized.’” (citations omitted)). As reasoned by the Examiner,

In *McRO*, the very first indication that a claim is directed to an improvement in computer-related technology is that a teaching in the specification explains how the claimed invention improves a computer or other technology. Further, the second indication is a particular solution to a problem or a particular way to achieve a desired outcome defined by the claimed invention, as opposed to merely claiming the idea of a solution or outcome. The instant claims, being related to financial transactions via a network of internet connected computers are not comparable to the *McRO* case in which those claims are directed to the specific improvements in computer based animation and realistic lip synchronization and facial expressions.

Ans. 6–7. We agree.

⁵ All MPEP citations herein are to MPEP Rev. 08.2017, January 2018.

In the pending claims, improvement is focused on the relative efficiencies in processing a domestic as opposed to a foreign or cross-border transaction, instead of improvement to the computer related technologies. *Id.* at 7 (“[T]he present case is different: the focus of the claims is not on such an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.”). Further, in the pending claims, the alleged improvement is focused largely on things that already were being done, i.e., processing domestic and foreign credit card transactions. *Id.* Given the known differences in efficiency in processing domestic, as opposed to a foreign transactions, the specific implementations recited in the claims are those that treat one known type of transaction as another and processes it accordingly. *See* Br. 27–28 (“And, as a result, can process such transactions conducted in a non-domestic country in a non-conventional manner, i.e., as a domestic transaction.”).

Moreover, the level of abstraction at which the Examiner describes the invention does not change the accuracy of the Examiner’s determination. *Apple Inc. v. Ameranth Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016) (“An abstract idea can generally be described at different levels of abstraction.”).

Thus, we are not persuaded that the Examiner improperly oversimplified the claims by looking at them too generally and failing to account for the specific requirements of the claims.

b. Recited Methods and Systems Do Not Improve Computer Functionality.

Appellants contend that the pending claims are analogous to those at issue in *Enfish*. Br. 14–15. Appellants note that the Specification teaches “an ongoing problem in the payment card industry is when financial

transactions are conducted in a foreign country, with a payment card issued by a payment card issuer of a domestic country. In such cases, the transactions are processed as cross-border transactions, which may incur additional fees and expense.” *Id.* at 15; *see* Spec. ¶ 6. According to Appellants,

The present claims improve upon such existing technologies by providing a mechanism that enables facilitation of the transaction authorization process between a merchant point-of-sale (POS) device and a card issuer, which identifies and transmits bank identification numbers (BINs) associated with an ICA (of a particular country in which a requesting issuing bank is located) to the requesting issuing bank. *And, as a result, can process such transactions conducted in a non-domestic country in a non-conventional manner, i.e., as a domestic transaction.*

Br. 15; *see id.* at 27–28; Reply 2–5.

Appellants contend that, in *Enfish*, the improvement was defined by logical structures and processes, instead of particular physical features. Appellants contend that, as with *Enfish*, the instant claims are defined by a “logical structure,” although embodied in known hardware. Br. 15–16; *see* Spec. ¶¶ 69–71, 76. Thus, Appellants contend that

the claims provide for a unique improvement to electronic transaction processing systems enabling the processing of non-domestic country transactions (transactions that occur in a foreign country) as a domestic/local transaction with a very specific use of IC[A]s and BINs (i.e., in a non-conventional manner).

Reply 4. The Examiner disagrees.

In *Enfish* the claims were held to be patent-eligible because the claimed invention achieves other benefits over conventional databases, such as increased flexibility, faster search times, and smaller memory requirements. In the case of *Enfish*, the claims

were directed to describe the steps of configuring a computer memory in accordance with a self-referential table.

Ans. 6. The Examiner asserts that the pending claims do not change the function of the database (*see* Spec. ¶ 76) or the computer technology (*see id.* ¶¶ 69–71), but merely apply them to improve on the abstract idea. Ans. 9–10.

Having considered the recitations of the pending claims in light of the Specification, we are persuaded that the improvements are to the abstract idea, rather than to the computer components by which the improvement is realized.

c. Cited Case Law Involves Similar Facts.

Appellants note that when an examiner determines a claim is directed to an abstract idea, the Office has indicated that “the rejection should identify the abstract idea as it is recited (i.e., set forth or described) in the claim, and explain why it corresponds to a concept that the courts have identified as an abstract idea.” Br. 17 (citing Comm’r for Patents Memorandum, “Formulating a Subject Matter Eligibility Rejection and Evaluating the Applicant’s Response to a Subject Matter Eligibility Rejection,” 2 (May 4, 2016) (“5/4/16 Mem.”)). Appellants contend that the Examiner’s explanations regarding the claims’ correspondence to the abstract ideas of *buySAFE*, *Classen*, and *Cyberfone* are deficient.

With regard to *buySAFE*, Appellants assert that the claims relate to the creation of a contractual relationship between parties, i.e., a transaction performance guarantee. Br. 17. Appellants contend, however, that their claims are readily distinguishable from the claims of *buySAFE* because the pending claims are directed to the particulars of how an electronic process is

carried out, rather than simply “applying” an alleged “abstract idea” to a generic computer. *Id.* at 17–18.

For the reasons set forth in the Examiner’s Final Action, we are not persuaded that the Examiner’s explanation is deficient. *buySAFE* relates to a contractual relationship between the parties, and the pending claims similarly relate to contractual relationships—agreements to make payment for a transaction between an issuing bank, the cardholder, and a merchant. Final Act. 8, 14; Ans. 9; *see* Spec. ¶¶ 2–6, 20–22, Figs. 3A, 3B; *see also* Spec. ¶ 31 (describing “support” and “benefits” provided by the first country issuer to the second country employee).

With regard to *Classen*, Appellants contend that those claims were directed *only* to collecting and comparing *known* information. Br. 17. According to Appellants, without applying the information in a step of the overall method, the claims at issue in *Classen* failed to recite patent eligible subject matter under § 101. *Id.* at 18–21.

For the reasons set forth in the Examiner’s Final Action, we are not persuaded that the Examiner’s explanation is deficient. *Classen* clearly relates to collecting and comparing known information. *Classen*, 659 F.3d at 1067 (“Claim 1 of the ’283 patent states the idea *of collecting and comparing known information.*”) (emphasis added). As the Examiner explains, however, BINs, subsets of BINs, and ICA numbers, recited in pending claims 1, 9, 10, and 18, also are known information. Final Act. 8, 14; Ans. 9; *see* Spec. ¶ 26, Figs. 3A, 3B.

With regard to *Cyberfone*, Appellants contend that:

The steps of the claim at issue in *Cyberfone* thus require “obtaining data,” “exploding” the data (e.g., separating the obtained data) and sending the data to various destinations based

entirely upon information provided in the obtained data. The unidentified data of *Cyberfone* is obtained in an **unparticular** manner, e.g., from a single transmission from a telephone. Further, no function is performed by the method of *Cyberfone* [that] transforms the data received. Instead, the received data is divided and transmitted. It is not altered in the process[,] and no particular result is described as being achieved by the method of the *Cyberfone* claim other than the transmission **of the originally received data**. The steps of the claim at issue in *Cyberfone* notably do not describe the manner in which information is obtained or any tangible result stemming from the performance of the method. Nor do they provide much detail as to how the method is executed, unlike Appellant's present claims.

Br. 22 (citations omitted).

Again, for the reasons set forth in the Examiner's Final Action, we are not persuaded that the Examiner's explanation is deficient. As with the pending claims, the claims in *Cyberfone* recite the organization, storage, and transmission of information. Final Act. 12; Ans. 9; *see Cyberfone*, 558 Fed. Appx. at 992 ("Here, the well-known concept of categorical data storage, i.e., the idea of collecting information in classified form, then separating and transmitting that information according to its classification, is an abstract idea that is not patent-eligible.").

Further, like *Cyberfone*, the pending claims do not recite a transformation of data, but, instead, merely recite its arrangement into subsets and its association for storage and transmission.

Numbers that may be suitable as the ICA will be apparent to persons having skill in the relevant art, such as an Interbank Card Association Number. . . . Each ICA stored in the card association database 120 may be associated with a plurality of bank identification numbers (BINs). Types of BINs will be apparent to persons having skill in the relevant art and may include portions of, such as the first four digits to, payment card numbers.

Spec. ¶ 26.

Thus, we are persuaded that the cases cited by the Examiner involved similar facts to those of this application.

2. *Preemption*

Appellants contend that “the [] claims do not create a risk for preemption of the alleged abstract idea of ‘the optimization of financial transaction authorization processing when a transaction is initiated in a country different from the country in which a payment card (used in the transaction) is issued.’” Br. 23. Appellants’ contention is unpersuasive.

We recognize that the U.S. Supreme Court has described “the concern that drives this exclusionary principle [i.e., the exclusion of abstract ideas from patent eligible subject matter] as one of pre-emption.” *See Alice*, 134 S. Ct. at 2354. However, characterizing preemption as a driving concern for patent eligibility is not the same as characterizing preemption as the sole test for patent eligibility. As our reviewing court has explained, “[t]he Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability” and “[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice Corp.*, 134 S. Ct. at 2354). “While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.” *Id.* at 1379; *see* Ans. 11. We are not persuaded that a potential lack of complete preemption is dispositive here.

We are persuaded that the Examiner did not err in finding that the pending claims are directed to an abstract idea.

3. *Alice Step Two*

Appellants contend that the pending claims recite significantly more than an abstract idea and/or that they recite an unconventional arrangement of conventional components. Br. 24–28. In support of this general contention, Appellants present a table allegedly showing “a recitation-by-recitation illustration of claim features and explanation as to how, individually and/or in combination, the features of the claims are more than well-understood, routine, and conventional activity.” *Id.* at 25–26.

Among these illustrations, Appellants contend that storing particular information, (i.e., BINs and ICAs, and the relation of that information to an issuing bank in a first country rather than a second country) (*id.* at 25); receiving a number request originating from the first country, rather than the second country (*id.* at 25–26); and associating the ICA from the first country with the second country because the number request came from the first country (*id.* at 26) are more than well-understood, routine, and conventional activities. These activities, however, relate to the organization of known information and do not amount to technological improvements to the processor or the databases or to another technology or technical field. Final Act. 9–10; Adv. Act. 1; Ans. 9–10 (citing Spec. ¶¶ 69–71, 76); *see* Final Act. 8 (“[T]he claim does not move beyond a general link of the use of an abstract idea to a particular technological environment.”).

Appellants’ remaining contentions also are unpersuasive. Appellants contend that “[t]he communication of transaction data with a merchant terminal (e.g., POS device) **requires the implementation of particular protocols**, which are not features readily available on ‘generic computers.’” Br. 26 (emphasis added). Nevertheless, the pending claims do not recite

“protocols” (*id.* Claims Appx.), and the Specification refers to known protocols (Spec. ¶¶ 32, 20, 48). *See* Ans. 9–12.

Appellants further contend that the recited methods and systems “[r]eceive[] very **specific information** and communicate[] between and with *specialized particular devices (merchant terminal)* to receive specific and sensitive information.” Br. 26 (emphasis added). As noted above, however, the Specification indicates that none of these devices is new or unconventional. Ans. 10 (citing Spec. ¶¶ 69–71, 76); *see* Final Act. 11. Thus, we understand “merchant terminals” to refer to known point-of-sale devices. Ans. 8; *see* Spec. ¶¶ 43, 48, 53.

Regarding whether the pending claims recite an unconventional arrangement of conventional components, Appellants contend that:

In the instant case, the Examiner suggests that the elements of the claims are merely a combined and coordinated execution of generic computer functionalities. (*see, e.g.,* final Office Action, at p. 5). Even if such a suggestion were true, which Appellant does not agree, it is respectfully submitted that, like the claims of *Bascom* (and [*Intellectual Ventures I LLC v. J. Crew Grp., Inc.*, 2016 WL 4591794 (E.D. Tex. Aug. 24, 2016)]), the present claims provide an inventive concept by virtue of the *non-conventional arrangement and configuration* of devices (and communication) of the electronic system. Upon a review of the above-provided table, it is clear that the elements of the claims, when considered at least in combination, recite an inventive concept that is clearly “significantly more” than the alleged abstract idea.

Br. 27. Appellants cite *BASCOM* as supporting the contention that “**an inventive concept can be found in the nonconventional and non-generic arrangement of known, conventional pieces.**” *Id.* Appellants contend that:

The present claims improve upon such existing technologies by providing a mechanism that enables facilitation of the transaction authorization process between a merchant point-of-sale (POS) device and a card issuer, which identifies and transmits bank identification numbers (BINs) associated with an ICA (of a particular country in which a requesting issuing bank is located) to the requesting issuing bank. And, as a result, can process such transactions conducted in a non-domestic country in a non-conventional manner, i.e., as a domestic transaction.

Id. at 15; *see id.* at 27–28.

As the Examiner finds, however, in the pending claims, it is not the arrangement of the components that embodies the improvement; instead, it is the transfer of information between these components that improves the abstract idea. Ans. 5 (“[I]n this [] instant case, the limitations simply narrow or limit the abstract idea without providing anything significantly more than the abstract idea itself.”). Therefore, we are not persuaded that the Examiner erred in finding that the pending claims fail to recite significantly more than an abstract idea.

4. *Requirement to Address Each Rejected Claim*

Finally, Appellants contend that the Examiner failed to address the claims individually and in detail. Br. 28; Reply 8–9. Appellants do not suggest, however, that an additional limitation recited in any of the dependent claims or a difference in the recitations of any of the independent claims would distinguish that claim under the Examiner’s *Alice/Mayo* analysis.

Nevertheless, we understand the Examiner to conclude that the *Alice/Mayo* analysis set forth in the Final Action applies equally to each of

the pending claims. Final Act. 3, 8; *cf. id.* at 13. Moreover, the Examiner states that:

The analysis above applies to the statutory category of invention of claims 1, 9, 10 and 18. Furthermore, dependent claims 3-8, and 12-17 do not resolve the issues raised in the independent claim. Accordingly, claims 1, 3-10 and 12-18 are rejected as ineligible for patenting under 35 U.S.C. 101 based upon the same analysis.

Ans. 10. Given this record, we determine that the Examiner has set forth the basis for the rejection of each of the pending claims in sufficient detail.

Consequently, we are not persuaded that the Examiner erred in rejecting claims 1, 3–10, and 12–18, so we sustain the rejection.

DECISION

For the above reasons, we affirm the Examiner's decision rejecting claims 1, 3–10, and 12–18.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED